ANNEX M

DEBRIS MANAGEMENT PLAN

I. Purpose

To facilitate and coordinate the removal, collection, and disposal of debris following a disaster; to mitigate any potential threat to the health, safety, and welfare of the impacted citizens, and expedite recovery efforts in the impacted area; and to address any threat of significant damage to improved public or private property.

II. Situation

Natural and man-made disasters precipitate a variety of debris that includes, but is not limited to, such things as trees, sand, gravel, building/construction materials, vehicles, personal property, etc.

The quantity and type of debris generated from any particular disaster is a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity. The quantity and type of debris generated, its location, and the size of the area over which it is dispersed directly impacts the type of collection and disposal methods used to address the debris problem, associated costs incurred, and the speed with which the problem can be addressed.

In a major or catastrophic disaster, the City of Ankeny may have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short- as well as long-term. Private contractors play a significant role in the debris removal, collection, reduction, and disposal process.

The debris management program implemented by the City of Ankeny will be based on the waste management approach of reduction, reuse, reclamation, resource recovery, incineration, and land filling, respectively.

III. Organization and Concept of Operations

The Public Works Department is responsible for the debris removal function. They will work in conjunction with designated support agencies, utility companies, waste management firms, and trucking companies to facilitate the debris clearance, collection, reduction, and disposal needs following a disaster.

The Public Works Department is responsible for removing debris from the public right-of-way. Only when it is deemed in the public interest will debris be removed from private property. If necessary, equipment will be staged in strategic locations both locally as well as regionally, to protect the equipment from damage, preserve the decision maker's flexibility for employment of the equipment, and allow for the clearing crews to begin work immediately after the disaster.

Because of the limited quantity of resources and service commitments following the disaster, the City of Ankeny may hire private contractors to remove, collect, and manage debris for reuse, resource recovery, reduction, and disposal. Using private contractors instead of government workers in debris removal activities has a number of benefits. It shifts the burden of conducting the work from the City of Ankeny to the private sector, freeing up government personnel to devote more time to their regularly assigned duties. Private contracting also stimulates local, regional, and state economies impacted by the storm, as well as maximizing state and local governments' level of financial assistance from the federal government. Private contracting allows the state and its political subdivisions to more closely tailor their contract services to their specific needs. The entire process (i.e., clearance, collection, transporting, reduction, and disposal, etc.) or segments of the process can be contracted out.

The Public Works Department will develop and maintain a list of approved contractors who have the capability to provide debris removal, collection, and disposal in a cost effective, expeditious, and environmentally sound manner following a disaster.

IV. Organization and Concept of Operations

The City of Ankeny is responsible for developing a debris management plan and shall select a "Debris Manager" to supervise a "Debris Management Staff". The staff shall be comprised of personnel to perform the following functions:

Administration

Function: Housekeeping, supplies, equipment, funding, and accounting.

Contracting and Procurement

Function: Bidding requirements, form, advertisements for bids, instructions to bidders, and contract development.

Legal

Function: Contract review, right of entry permits, community liability, condemnation of buildings, land acquisition for temporary staging and reduction sites, land acquisition for disposal sites, insurance.

Operations

Function: Supervision of government and contract resources and overall project management.

Engineering

Function: Detailed damage assessment, identification of project tasks, assignments of tasks, preparation of estimates, plans, specifications, and recommendation of contract award.

Public Information Specialist

Function: Coordinate press releases, contacts with local organizations, individuals, and media; and public notices for debris removal and disposal contracts.

The staff shall coordinate with all state and federal agencies responsible for disaster response and recovery operations. The staff will be assigned to the following tasks:

Assembling to develop a Debris Management Plan.
Developing an analysis of debris management capability
Discouraging development in hazardous zones.
Developing public information and education programs.
Training personnel in debris management techniques.
Maintaining pre-disaster maps, blueprints, photos and other documents.
Making a list of critical facilities (streets, roads, and bridges) requiring debris clearance.
Identifying non-government groups that could assist in debris management activities.

V. Contracts and Cooperative Agreements

Sample contracts, with a menu of services and generic scopes of work, will be developed by the City of Ankeny prior to the disaster. This will allow the city to more closely tailor its contracts to its needs, as well as expedite their implementation in a prompt and effective manner.

The City of Ankeny will be responsible for managing the debris contract from project inception to completion. Managing the debris contract includes such things as monitoring performance, contract modifications, inspections, acceptance, payment, and closing out of activities. The City of Ankeny is encouraged to enter into cooperative agreements with other state agencies and local governments to maximize public assets. The development of such agreements must comply with the guidelines established in their agency procurement manual. All state agencies and local governments that wish to participate in such agreements should be identified prior to the development and implementation of the agreement.

The three types of contracts that may be required are the:

Times and Materials Contract. Will be limited to the first 100 hours of operation and only after all state and local equipment has been committed. The price for equipment applies only when the equipment is operating. The City of Ankeny can terminate the contract at its convenience and does not guarantee a minimum number of hours.

Lump Sum Contract. The price of the work is fixed unless there is a change in the scope of work to be performed. Lump sum contracts will be calculated on either the "area" method or the "pass" method. The lump sum contract shall only be used when the scope of work is clearly defined and the areas of work can be specifically quantified.

The Unit Price Contract. Is the most accurate account of actual quantities removed. Requires field inspectors to measure the completed work. All contractor trucks must be measured. Requires load tickets identifying truck number, contract number, contractor's name, date, time-departed site, and estimated volume.

The City of Ankeny has drawn up sample contracts and these contracts are attached to this plan.

The City of Ankeny shall adopt by resolution the Statewide Mutual Aid Compact. This agreement includes utilization of personnel, equipment, public works and engineering, building inspection, communications, emergency services, and law enforcement.

The City of Ankeny will identify certain volunteer, state and federal agencies ready to assist. These agencies include the Ankeny Community Emergency Response Team (ACERT), civic clubs, church organizations, the Salvation Army, the State Department of Transportation, the National Guard, scrap dealers, and the U.S. Department of Labor. The volunteer organizations will be coordinated by the ACERT with assistance from county and state agencies.

VI. Debris Storage and Reduction Sites

Debris storage and reduction sites will be identified and evaluated by interagency site selection teams comprised of a multi-disciplinary staff that is familiar with the area. A listing of appropriate local, state, and federal contacts will be developed by the appropriate agencies to expedite the formation of the interagency, multi-disciplinary site selection teams.
Initially debris will be placed in temporary holding areas, determined before the onset of the disaster, until such time as a detailed plan for debris collection and disposal is prepared. This is not anticipated until after local traffic has been restored.

Temporary debris collection sites should be readily accessible by recovery equipment and should not require extensive preparation or coordination for use. Collection sites will be on public property when feasible to facilitate the implementation of the mission and mitigate any potential liability requirements. Activation of sites will be under the control of the Public Works Director and will be coordinated with other recovery efforts through the emergency operations center.

Site selection criteria will be developed into a checklist format for use by these teams to facilitate identification and assessment of potential sites. Criteria will include such factors as ownership of property, size of parcel, surrounding land uses, environmental conditions, and

transportation facilities that serve the site. A site selection priority list is included as an attachment to this plan.

The following is a list of temporary holding sites:

City Landfill, Old West Treatment Plant
North Creek Park
Prairie Ridge Sports Complex parking lots
Prairie Ridge Aquatic Center parking lots
Northview Middle School north parking lot

VII. Debris Removal Priorities

The debris removal process must be initiated promptly and conducted in an orderly, effective manner in order to protect public health and safety following a major or catastrophic event. To achieve this objective, the first priority will be to clear debris from key roads in order to provide access for emergency vehicles and resources into the impacted area. Key roads in Ankeny are identified as follows:

First St.
Ash Drive
Ankeny Blvd.
Delaware Ave.
State St.
Irvinedale Dr.
Oralabor Rd.
18th St.
36th Street
Corporate Woods Drive

The need and demand for critical services will increase significantly following a disaster. Therefore, the second priority of debris removal resources will be to provide access to critical facilities pre-identified by state and local governments. Critical facilities in Ankeny have been identified as:

City Hall
Fire Station
Police Station
Public Services Building
Ankeny Maintenance Facility
Wastewater Treatment Plant

The third priority for the debris removal teams to address will be the elimination of debris related threats to public health and safety. This will include such things as the repair,

demolition, or barricading of heavily damaged and structurally unstable buildings, systems, or facilities that pose a danger to the public. Any actions taken to mitigate or eliminate the threat to the public health and safety must be closely coordinated with the owner or responsible party. If access to the area can be controlled, the necessary actions can be deferred.

Debris Classification

To facilitate the debris management process, debris will be segregated by type. It is recommended that the categories of debris established for recovery operations be standardized.

Segregation of Debris

Garbage and trash from residents should be set out at the curb as normal. Residents will be informed not to mix garbage and trash with structural debris, vegetation, tires, household hazardous waste or appliances.

The Metro Waste Authority Public Information Officer will develop a proactive information management plan. Emphasis will be placed on actions that the public can perform to expedite the cleanup process. Flyers, newspapers, radio and TV public service announcements will be used to obtain the public's cooperation in separating tree and landscape debris; segregating household hazardous materials, banned materials and appliances; placing disaster debris at the curbside; and segregating garbage and recyclable materials. Pickup schedules will be disseminated in the local news media.

Household Hazardous Waste (HHW)

The Regional Collection Center (RCC) will establish contacts with local, state, and federal regulatory agencies after the disaster. The RCC shall be responsible for coordinating drop-off locations with regulatory agencies within the debris zones as needed. RCC staff will provide for the removal and disposal of any and all eligible hazardous waste brought to these sites. RCC staff will maintain contact with regulatory agencies to ensure cleanup actions meet local, state and federal regulations.

Contractors and public works staff are encouraged to separate HHW at the curb and not haul it to a debris management site or the landfill. Residents will be encouraged to separate and transport HHW to pre-identified drop-off points.

The RCC will receive, by appointment, HHW collected by the public works division at its permanent facility at 225 Prairie Drive in Bondurant, IA.

Business Hazardous Waste

RCC staff will provide technical assistance to businesses regarding the disposal of hazardous waste. For eligible industrial or commercial hazardous waste resulting from the disaster, the

RCC will provide collection and disposal assistance. Businesses may call the RCC at 967-5512 for help.

Special Waste

Special waste for disaster-affected businesses will be expedited on a case-by-case basis. For special assistance, businesses may call 323-6525.

Appliances

Appliances must be segregated from other disaster debris. All appliances must be demanufactured before being recycled or disposed of. The demanufacturing of appliances is governed by Chapter 567-IAC 188 "Discarded Appliance Demanufacturing." "Metro Waste Authority Appliance Acceptance Policy" governs the acceptance and unloading of appliances at Metro Park East Landfill (MPE) and this policy is attached as an annex.

Asbestos

Regulated asbestos containing material (RACM) must be separated from construction and demolition waste. RACM may be disposed of at MPE if it is accompanied by a waste shipment record and complies with the provisions of the Asbestos NESHAP.

Ash Disposal

Ash from burn sites should be tested using the Toxicity Characteristic Leaching Procedures (TCLP). One composite sample from each separate ash pile should be analyzed. If contamination is not found, ash may be disposed of at MPE under an MPE permit.

Soil Disposal

The disposition of soil is determined through a process that characterizes the material for potential hazardous and designated constituents. MPE can accept all non-hazardous soil that is not suitable for reuse onsite.

Soils must be tested if it is determined that there is fuel, oil or other hazardous materials present. Soil can be temporarily stored pending receipt of soil analytical data. Stored soil that is determined to be hazardous must be removed.

Waste Tires

Scrap tires collected during a disaster may be taken to the MRC, the RCC, or the MPE landfill for recycling. Scrap tires should never be burned.

Dead Animals

Emergency storm events can result in loss of livestock, pets, and natural wildlife. MPE can accept segregated loads of dead animals.

VIII. Debris Disposal and Reduction

Once the debris is removed from the damage sites, it will be taken to the temporary staging sites. The three methods of disposal are burning, recycling, and grinding/chipping. Grinding and chipping will be utilized as a viable reduction method. Grinding and chipping reduces the volume on a 4 to 1 ratio. For grinding and chipping to be feasible, 25% of volume remaining must have some benefit or use.

The three primary burning methods are open burning, air curtain pit burning, and incineration. Controlled open burning is a cost-effective method for reducing clean woody debris in rural areas. Burning reduces the volume by 95%, leaving only ash residue to be disposed of. Air curtain pit burning substantially reduces environmental concerns. The blower unit must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. Portable incinerators use the same methods as air curtain pit systems. The only difference is that portable incinerators utilize a pre-manufactured pit in lieu of an onsite constructed earth/limestone pit.

Metals, wood, and soils are prime candidates for recycling. Most of the non-ferrous metals are suitable for recycling. Specialized contractors are available to bid on disposal of debris by recycling if it is well sorted.

Site Close-Out Procedures

Each temporary debris staging and reduction site will eventually be emptied of all material and be restored to its previous condition and use. Before activities begin ground and aerial photos will be taken. Important features such as structures, fences, culverts, and landscaping will be noted. Random soil samples will be taken as well as water samples from existing wells. The site will be checked for volatile organic compounds.

After activities begin, constant monitoring of soil, water and air quality will take place. Photo, maps, and sketches of the site will be updated and fuel spills will be noted. At closeout, final testing of soil, water, and air quality will be conducted and compared to original conditions. All ash will be removed and any remediation actions will be taken.

IX. Debris Management Actions

The Debris Management Plan is separated into four stages:

Stage 1 Normal Operations

- Develop a local and regional resource list of contractors who can assist local governments in all phases of debris management.
- Develop sample contracts with generic scopes of work to expedite the implementation of debris management strategies.
- Develop mutual aid agreements with other state agencies and local governments, as appropriate, following guidelines established in agency procurement manuals.
- Identify and pre-designate potential debris storage sites for various types and quantities of debris anticipated following a catastrophic event.
- Pre-identify local and regional critical routes and key roads in cooperation with contiguous and regional jurisdictions.
- Develop site selection criteria checklists to assist in identifying potential debris storage sites.
- Identify and coordinate with appropriate regulatory agencies regarding potential regulatory issues and emergency response needs.
- Develop the necessary right of entry and hold harmless agreements indemnifying all levels of government against any potential claims.
- Establish damage and debris assessment processes to define the scope of the problem.
- Develop and coordinate pre-scripted announcements with the Public Information Office (PIO) regarding debris removal processes, collection times, temporary storage sites, use of private contractors, environmental and health issues, etc.

Stage 2 Increased Readiness

(A natural or man-made disaster is threatening the local area)

- Review and update plans, standard operating procedures, generic contracts, and checklists relating to debris removal, storage, reduction, and disposal process.
- Alert local departments that have debris removal responsibilities ensuring that personnel, facilities, and equipment are ready and available for emergency use.
- Relocate personnel and resources out of harm's way and stage in areas where they can be effectively mobilized.
- Review potential local, regional, and debris staging and reduction sites that may be used in the response and recovery phases of the impeding threat.
- Review the resource list of private contractors who may assist in the debris removal process and make necessary arrangements to ensure their availability in the event of the disaster.

Stage 3 Response

- Activate debris management plan; coordinate with needs assessment team.
- Begin documenting costs.
- Coordinate and track resources (public and private).
- Establish priorities regarding allocation and use of available resources.

- Identify and establish temporary debris storage and disposal sites (local, regional).
- Address any legal, environmental, and health issues relating to the debris removal process.
- Continue to keep the public informed through the PIO.

Stage 4 Recovery

- Continue to collect, store, reduce, and dispose of debris generated from the event in a cost-effective and environmentally responsible manner.
- Continue to document costs.
- Upon completion of debris removal mission, close out debris storage and reduction sites by developing and implementing the necessary site restoration actions.
- Perform necessary audits of operation and submit claim for federal assistance.

X. Presidential Disaster Declaration – Metro Waste Authority's Role

Should the Governor request a Presidential Disaster Declaration and FEMA designate Metro Waste Authority's planning area (or a portion of the planning area) as eligible for assistance, MWA will waive disposal and recycling fees for disaster debris provided MWA is eligible to recover these expenses. MWA Public Affairs Manager will announce this decision, and the protocol for qualifying for waiver of fees, prior to the acceptance of disaster debris.

Regular municipal solid waste and waste from cities and businesses not affected by the disaster will not be eligible for waiver of fees.

All debris removed to Metro Park East Landfill should not be disposed of until after being viewed by Federal Damage Assessment personnel to facilitate reimbursement of removal and disposal costs.

Hours of Operation

Following the assessment of the damage and the amount and types of debris, the Executive Director, in conjunction with city official and contracted haulers, will establish hours and days of operation at MWA facilities as necessary to support the efficient and timely cleanup of debris.

Attachments

The overall Disaster Debris Management Plan includes different types of planning and processes. These are covered in the following sections:

Attachment 1	Estimating Debris Quantities
Attachment 2	Contracting and FEMA Reimbursement
Attachment 3	Community Equipment Inventory
Attachment 4	Temporary Disposal Sites
Attachment 5	(Reserved) Public Communications
Attachment 6	Metro Waste Authority Debris Management Plan
Attachment 7	(Reserved) Metro Waste Authority Household Hazardous Waste Debris Management Plan
Attachment 8	Iowa Mutual Aid Compact

XI. Authentication

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Date Director of Public Works